

DOCUMENT RESUME

ED 368 309

HE 027 334

TITLE Higher Education in Texas: 1994 Status Report.
INSTITUTION Texas Higher Education Coordinating Board, Austin.
PUB DATE [94]
NOTE 21p.
AVAILABLE FROM Texas Higher Education Coordinating Board, P.O. Box
12788, Capitol Station, Austin, TX 78711.
PUB TYPE Reports - Evaluative/Feasibility (142)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Access to Education; Campus Planning; College
Programs; Educational Finance; Educational Policy;
*Educational Quality; *Enrollment Trends; *Higher
Education; Long Range Planning; Research; Research
Projects; School Business Relationship; State Aid;
State Boards of Education; Statewide Planning

IDENTIFIERS *Texas

ABSTRACT

This report on the status of higher education in Texas covers enrollment trends, quality and access, research, campus planning, funding, and Texas Higher Education Coordinating Board activities. The first section looks at enrollment trends and projections to the year 2005 highlighting an expected 250 percent increase in the number now attending the state's largest public university. It identifies strategies to improve transfer of college courses and changes in the Texas Academic Skills Program test for college bound students. The second section examines program quality and access and describes partnerships to address workforce needs, math and science initiatives, medical education efforts, and use of technology in educational services. The third section focuses on access to education particularly dropout prevention and minority recruitment. The following section covers research, state funding for research, and the advent of a new publication featuring commercial applications of university research. The fifth section looks at campus planning, reducing deferred maintenance, assessing campus space needs, and expanding funds for construction. The next section discusses funding and appropriations including facilities funding, special item funding and evaluation of tuition and fees. The final section describes the Texas Coordinating Board's effort to promote quality, access, and efficiency. Many figures illustrate the report. (JB)

* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *



"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY
Texas Higher Education
Coordinating Board

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

☒ This document has been reproduced as
received from the person or organization
originating it.

☐ Minor changes have been made to improve
reproduction quality.

• Points of view or opinions stated in this docu-
ment do not necessarily represent official
OERI position or policy.

HIGHER EDUCATION IN TEXAS

1994 STATUS REPORT

TEXAS HIGHER EDUCATION
COORDINATING BOARD

AE027 334

TEXAS HIGHER EDUCATION COORDINATING BOARD

Chair

Nancy E. Atlas
Houston

Wendy Marsh
Amarillo

Janie S. McGarr
Dallas

Vice Chair

Charles C. Sprague, M.D.
Dallas

Andrew Melontree
Tyler

W. Mike Baggett
Dallas

Martha Miller
Texarkana

Herbert L. Butrum
Houston

Tom C. Nichols
Lubbock

Joaquin G. Cigarroa, Jr., M.D.
Laredo

Patricia Prather
Houston

Rene Haas
Corpus Christi

Ray E. Santos, M.D.
Lubbock

Lawrence E. Jenkins
Austin

Carlos Villa
El Paso

Joseph R. Krier
San Antonio

Mary Beth Williamson
San Antonio

ON THE COVER:

The Texas Higher Education Coordinating Board's administration of the state's Advanced Technology Program helps provide cutting-edge educational opportunities to students like Francisco Delgadillo, Jr. of El Paso (center). Delgadillo works with Texas Tech University researchers Kathleen Hennessey (left) and Lin You Ling (right) to develop an inspection unit that automatically identifies computer chip defects.

To date, this effort has resulted in four patent applications and five licensing agreements with several companies and has generated \$215,000 in licensing revenues. The inspection unit will improve the speed and accuracy of inspections at computer chip manufacturing companies and ensure high quality products. An adaptation of this system is expected to be installed in a new \$500 million semiconductor factory planned in Dallas. (Cover photograph courtesy of Texas Tech University. Photograph by Artie Linnier, Photo Bureau, News and Publications Office.)

HIGHER EDUCATION IN TEXAS

1994 STATUS REPORT

**TEXAS HIGHER EDUCATION
COORDINATING BOARD**

*The Texas Higher Education Coordinating Board does not
discriminate on the basis of race, color, national origin, gender, religion,
age or disability in employment or the provision of services.*

CONTENTS

PAGE
1

STUDENTS: ENROLLMENT TRENDS

By 2005, Texas colleges and universities are projected to enroll more than 153,000 additional students — that's three and a half times the number now attending the state's largest public university. **IMPROVING TRANSFER.** Saving students time and money by improving transfer of college courses. **TASP TEST.** Encouraging more students to better prepare for college.

PAGE
3

PROGRAMS: QUALITY AND ACCESS

Do Texas universities attract sufficient numbers of students to high quality programs? The Texas Higher Education Coordinating Board wants to know. **WORK FORCE.** Forging new partnerships to improve the delivery of work force education and training. **MATH, SCIENCE INITIATIVES.** Improving teaching methods. **PHYSICIAN EDUCATION.** Training family physicians to meet critical needs. **TECHNOLOGY.** Revolutionizing the way universities offer instruction and share library resources.

PAGE
6

ACCESS: A CHANGING POPULATION

Texas' third state plan will address the significant underrepresentation of minorities in higher education. **DROPOUT PREVENTION.** Motivating at-risk students to go to college — programs that work. **MINORITY RECRUITMENT.** Bringing more minorities into graduate education and faculty positions.

PAGE
9

RESEARCH: INVESTING IN THE FUTURE

Texas is home to the nation's largest competitive, peer-reviewed, state-supported research grant programs — and their impact is being felt in the marketplace. **SPECIAL ITEMS.** Boosting state funding for research. **TEXAS TECHNOLOGY.** A new publication featuring commercial applications of university research.

PAGE
11

CAMPUS PLANNING: EVALUATING NEED AND COST

The state's college buildings are aging, but efforts are under way to reduce deferred maintenance and better assess campus space needs. **HIGHER EDUCATION ASSISTANCE FUND.** Expanding a source of funds for campus construction, libraries and other uses.

PAGE
12

FUNDING: HIGHER EDUCATION APPROPRIATIONS

Higher education funding increased by 9 percent overall in the 1994-95 biennium, but some institutions are seeing flat or decreased funding. **SOUTH TEXAS.** Making the most of increased state dollars for program development and construction. **FACILITIES FUNDING.** Tapping into one of two constitutionally guaranteed sources of funds. **SPECIAL ITEM FUNDING.** Continuing to grow. **TUITION AND FEES.** Texas colleges and universities — still a bargain.

PAGE
14

COORDINATING BOARD: LEADERSHIP AND COORDINATION

The Coordinating Board promotes quality, access and efficiency in all aspects of higher education. **IDENTIFYING THE ISSUES.** Performance funding, doctoral hour funding and a need for a community college in McAllen. **PARTNERSHIPS.** Working with other state agencies on research, teacher education, work force development, cost savings and more. **RESPONSIBILITIES.** Coordinating the effective delivery of higher education in Texas.

STUDENTS

ENROLLMENT TRENDS

ENROLLMENT GROWTH

According to conservative enrollment forecasts by the Texas Higher Education Coordinating Board, more than 153,000 additional students are expected to enroll in the state's public and independent higher education institutions by 2005. That increase would be equivalent to nearly three and one-half times the number of students now attending the state's largest institution, the University of Texas at Austin.

Overall, enrollment inched up slightly in public and independent institutions of higher education in Texas in fall 1993 — with preliminary data showing a total increase of 1,448 students. Gains were concentrated in the state's community colleges.

For the first time since 1986, enrollment dropped among the state's public universities. While 18 institutions reported increased or constant enrollment in fall 1993, overall public university enrollments fell by slightly more than 3,000 students or nearly 1 percent from fall 1992.

Over the last two years, many institutions have raised admissions standards as both an enrollment management tool and as a way to improve student retention and graduation rates. It is a trend endorsed by the 73rd Legislature, which passed HCR 68 encouraging public universities to use the college-preparatory curriculum adopted by the State Board of Education and endorsed by the Coordinating Board as a model for raising their admission standards by the year 2005.

Enrollment gains among the state's community colleges mirror a national

trend. Open admission policies, improved transfer options, lower cost and their proximity to home and family make community colleges an increasingly attractive entry point into higher education for Texas students. To encourage a smooth transition into the community college, higher education and the public schools have worked together to develop a popular Tech-Prep curriculum which meshes the last two years of high school with the first two years of college.

For the public Texas State Technical College System, conversion of the TSTC-Harlingen extension center at McAllen to a public community college was largely responsible for an 8.4 percent decrease in enrollment.

TSTC's four other extension centers and four main campuses enrolled a combined 7,291 students in fall 1993. TSTC-Waco and TSTC-Sweetwater experienced enrollment gains of almost 2 percent and 9 percent, respectively, while enrollment dropped by about 1 percent at TSTC-Amarillo.

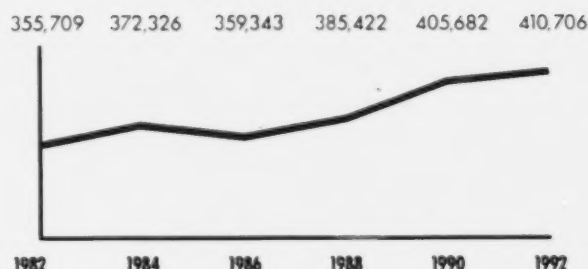
IMPROVING TRANSFER

Facilitating student transfer is a top priority of the Coordinating Board and the institutions as they strive to broaden students' educational options and avoid duplicate coursework that wastes students' time and money.

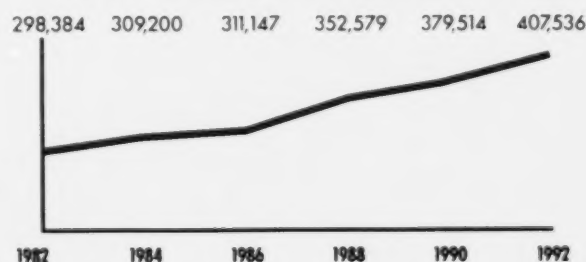
A state statute requires that transfer policies be adopted by permanent

TEXAS STUDENT HEADCOUNT: 1982-1992

Public Universities



Public Community and Technical Colleges



BEST COPY AVAILABLE

advisory committees established by each public university and its feeder community and technical colleges.

Students can now look in their college catalogs to find out which lower-division courses are eligible for transfer to a Texas university. These courses are identified by a common course number, developed voluntarily by a consortium of institutions, that is included in the Coordinating Board's *Community College General Academic Course Guide Manual*. Almost 100 Texas colleges and universities — including every public community college district in the state — now participate in the Texas Common Course Numbering System.

All public institutions are required to include transfer dispute resolution guidelines, adopted by the Coordinating Board, in their catalogs.

If a university requires a student to retake a course

unnecessarily, Coordinating Board rules require that state funding for credit hours in the repeated course be deducted from the institution's state appropriation. If courses offered by a community college are repeatedly denied for transfer because the quality is poor, then state funding for those credit courses will be deducted from that institution's state appropriation. The Commissioner of Higher Education has statutory authority to resolve transfer disputes between institutions.

To further facilitate transfer, the Coordinating Board sponsors model transfer projects to test better ways of providing academic advisement, referral, student follow-up and financial aid counseling. Examples include the B.E.S.T. project involving Blinn College, Texas A&M University and Sam Houston State University.

Other projects include the South Texas Transfer Project including Southwest Texas Junior College, Texas A&M University-Kingsville, Southwest Texas State University, the University of Texas at San Antonio and Sul Ross State University. Both of these programs emphasize transfer of minority students to universities.

TASP TEST

Changes were made in the Texas Academic Skills Program (TASP) during 1993 to avoid the over-testing of students, improve the test as a screen for basic skills deficiencies and encourage students to take more challenging high school courses to better prepare them for college.

Legislation adopted in the 73rd Session exempts students making high scores on the ACT, SAT or TAAS tests from taking the TASP Test. All other incoming

Texas college students must take the TASP Test of basic mathematics, reading and writing skills before they complete nine semester credit hours. If they do not pass one or more sections of the TASP Test, students must participate in some form of

remediation — and must pass all portions of the TASP Test before they can take upper-level courses beyond 60 semester credit hours.

The test is offered six times a year at more than 100 locations throughout the state. Waivers from the \$26 TASP Test fee are available for financially needy students.

As added encouragement for high school students to take courses that will better prepare them for college, the Coordinating Board established new TASP standards. In September 1993, the TASP Test was expanded to include more diagnostic reading passages and to test readiness for college-level algebra.

An interim remediation standard slightly higher than the minimum passing standard was put in place for reading and mathematics. Students who meet the minimum passing standard but do not meet this higher standard must participate in appropriate remediation, but will not be prohibited from graduating or from taking upper-division courses beyond 60 semester credit hours. The interim remediation standard will become the minimum passing standard in September 1995. At that time, the Coordinating Board will consider gradually phasing in higher TASP passing standards.

STUDENT FOLLOW-UP

For two years, the Coordinating Board has used the Automated Student and Adult Learner Follow-up System to identify community and technical college students who have pursued additional education or who are employed within one year of completing college.

This tracking effort has been made possible by matching student data against the Board's enrollment data bases and the Texas Employment Commission's unemployment insurance wage-record data base.

In 1993-94, the Coordinating Board will follow up with an employer survey to determine whether the jobs held by graduates are related to their community or technical college training. From the survey, the Board also can estimate the average salaries of full-time workers who are graduates of different types of college programs. This expanded student and adult learner tracking system will provide yet another piece of data to help evaluate the effectiveness of college programs.

PROGRAMS

QUALITY AND ACCESS

FACULTY

From 1983 to 1992, the number of faculty at Texas public universities increased by 7.6 percent. Part-time faculty and teaching assistants accounted for most of that increase.

A study of faculty teaching workload over the same 10-year period indicates that there has been little change in the amount of teaching performed per faculty member. Tenured faculty still represent the highest percentage of faculty and the source of the highest percentage of semester credit hours of course-work generated. The percentage of semester credit hours generated by part-time faculty has increased by nearly 46 percent, but part-time faculty still accounted for a small portion — less than 13 percent — of all semester credit hours generated.

The Texas Higher Education Coordinating Board approved 104 new degree programs at public universities and 18 associate degree and 20 certificate programs at public community and technical colleges in FY 1993.

At the same time, the Board expanded its sunset review of existing programs. After terminating 105 low-producing or poor quality doctoral programs and identifying another 59 as needing Board-monitored improvements, the agency asked the public universities to identify low-producing bachelor's and master's programs. A review is under way

to determine if these programs should be closed or phased out. Community and technical colleges also closed 82 associate or certificate programs in response to changing community work force needs.

In the last year, the Board approved a new timetable for staff review of degree program requests and now will act on proposed doctoral degrees within five quarterly meetings of their initial submission and on all other proposed degrees within four meetings.

The 73rd Legislature's South Texas Initiative provided several opportunities to improve higher education in the border regions. The 1994-95 legislative appropriation for academic program development at institutions along the border totaled \$964 million — up from \$399 million in 1992-93. In addition, state lawmakers voted to convert Texas State Technical College-Harlingen's extension

center in McAllen into the South Texas Community College District — an action recommended by the Coordinating Board as part of its statutorily mandated review of the TSTC System. A local tax base must be established by the year 2000 or the community college will be dissolved.

WORK FORCE

With passage of SB 642 in spring 1993, the Coordinating Board became one of seven state agencies represented on a new Texas Council on Workforce and Economic Competitiveness charged with improved delivery of work force education and training in Texas.

The Coordinating Board remains committed to ensuring that approved academic and technical programs train students for high-wage jobs responsive to market needs — while providing students the flexibility to pursue additional education. In FY 1993, the Board awarded 109 discretionary grants under the Carl D. Perkins Vocational and Applied Technology Education Act of 1990 to ensure that technical programs meet work force needs and to support curriculum and personnel development, research, and model projects to promote quality in teaching.

Texas is a national leader in guaranteeing its graduates and approving new technical programs contingent on performance of existing ones. Almost all

TEXAS INSTITUTIONS OF HIGHER EDUCATION

Public

- 26 Four-year universities
- 50 Community college districts with 70 campuses
- 8 Two-year, upper-level universities or centers
- 3 Lower-division institutions
- 4 Texas State Technical College System campuses and 4 extension centers
- 9 Health-Related institutions

Independent

- 38 Four-year colleges and universities
- 2 Junior colleges
- 2 Health-Related institutions

142 Total

community and technical colleges have adopted Coordinating Board guidelines to provide up to nine hours of additional, tuition-free coursework for graduates who are unable to perform tasks for which they were trained. The Board requires that at least 85 percent of the graduates of a community or technical college be employed or enrolled in higher education. Programs not meeting the 85 percent standard must have a plan in place to make improvements, but if those gains are not made at the end of two years, the programs may be closed.

MATH, SCIENCE INITIATIVES

In keeping with the national goal to improve mathematics and science teaching, more than \$6.5 million in federal funds were awarded by the Coordinating Board in 1993 to 74 colleges and universities through the Dwight D. Eisenhower Mathematics and Science Higher Education Grants Program. Texas colleges and universities work in partnership with Texas school districts to improve the knowledge and teaching skills of elementary and secondary science and mathematics teachers.

Since this program was created nine years ago, 505 Texas projects have received competitive grant awards totalling more than \$20 million.

The beneficiaries are the more than one million stu-

dents who, since 1985, have attended classes taught by teachers receiving the latest in mathematics and science education training offered through the Eisenhower program.

The Coordinating Board continues to support the TexPREP program, which it initiated in 1985 to enhance minority student participation in mathematics and science.

Another program aimed at improving science and mathematics education was expanded in September 1993. The Minority Mathematics and Science Foundation Cooperative now includes nine universities, two community college campuses and 30 predominantly minority and disadvantaged elementary and middle schools in 14 school districts throughout the state.

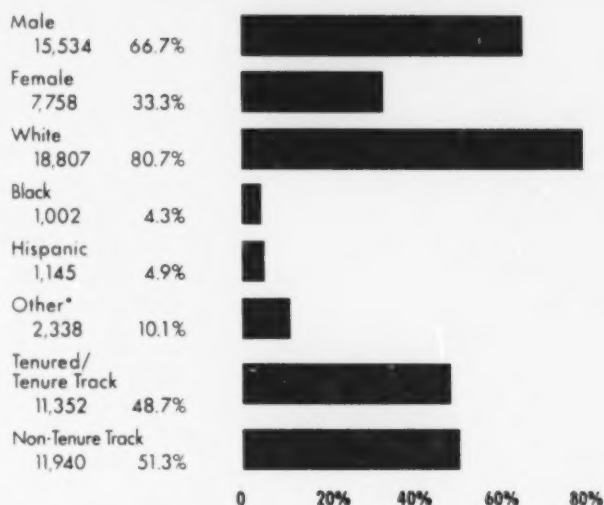
PHYSICIAN EDUCATION

Eighty-five percent of the more than 1,500 family physicians trained through the Coordinating Board's Family Practice Residency Program since 1979 are practicing medicine in Texas. More than 200 work in rural counties and 90 work in counties designated as Health Professional Shortage Areas.

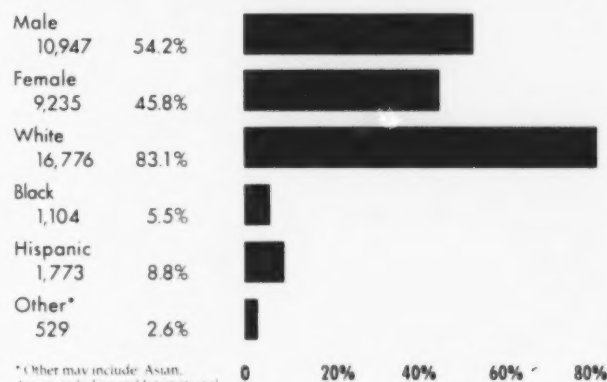
The 73rd Legislature created a new pilot project to enhance training of family practice residents and to expand delivery of indigent health care. Three programs — in Austin, Lubbock, and Waco — will

TEXAS FACULTY PROFILE: FALL 1992

Texas Public Universities



Texas Public Community and Technical Colleges



* Other may include: Asian, American Indian and International

each receive \$330,000 in supplemental funding to implement these projects.

The Physician Education Loan Repayment Program provides an incentive for physicians to work in medically underserved regions of Texas and in certain state agencies. Portions of physicians' educational loans are repaid for each year that they practice medicine in Texas communities that lack adequate health care services. The

Coordinating Board's state appropriation totaled \$650,000 for FY 1994. The Board also competed to receive an additional \$425,000 in federal matching funds.

The 73rd Legislature also appropriated \$500,000 to expand eligibility for this loan program to second or third year Family Practice Residency Program participants who have committed to practice in an economically depressed or rural medically underserved area.

TECHNOLOGY

The Coordinating Board established a new Board committee to address the use of technology to expand access to and improve the quality of higher education.

The Board also expanded cooperative programs offered via telecommunications in FY 1993. For example, the University of Texas at Arlington now provides nursing instruction via telecommunications to students at Grayson County College, McLennan Community College, Paris Junior College and Texarkana College. Texas A&M University-Corpus Christi provides

nursing instruction to students at Texas A&M International University and The Victoria College.

Institutions' growing reliance on technology to increase the availability of educational programs and to reach students in underserved areas is being documented in a statewide Coordinating Board survey. A progress report will be submitted to the 74th Legislature in January 1995.

Technology is also revolutionizing the way institutions operate their libraries. An appropriation of \$1 million was trustee to the Coordinating Board for the TEX-SHARE program to facilitate electronic sharing

of library resources among public universities and health-related institutions.

To promote the use of technology on public community and technical college campuses, the Coordinating Board awarded \$3,000 grants to 34 schools in FY 1993 to help finance their connection to THENet and Internet. These electronic networks allow communication and the transfer of data through computer links.

FACULTY SALARIES: 1993

Comparison of Average Faculty Salaries for Public Senior Institutions in the Ten States with Populations Nearest Texas, All Ranks



ACCESS

A CHANGING POPULATION

FINANCIAL AID

■ More than \$1.4 billion in financial aid was available from all sources to Texas college students in Texas in FY 1992.

■ Loans accounted for 56.2 percent of the financial aid received from all sources by Texas students in FY 1992.

■ The Hinson-Hazlewood College Student Loan Program, a self-supporting program administered by the Coordinating Board, provided more than \$87 million in loans to 22,644 students in FY 1993.

Although more Blacks and Hispanics are enrolling at Texas public institutions of higher education, they remain significantly underrepresented — especially at the master's and doctoral level — in Texas higher education. These population groups account for approximately 41 percent of the state's age 15 to 34 population, but only about 26 percent of the state's public community and technical college and university enrollment. Although almost 2,000 doctorates were awarded in Texas in 1991, Black students received only 72 and Hispanic students only 56.

Minority faculty are also underrepresented. In 1992, only 5.1 percent of the full-time faculty at public higher education institutions were Black, and only 6.3 percent were Hispanic. On traditionally White campuses, Blacks accounted for only 2 percent and Hispanics only 7 percent of the full-time faculty.

To support efforts to include more Blacks and Hispanics in higher education, and in response to a request by Governor Ann Richards, the Coordinating Board has developed a third successive educational opportunity plan. *Access and Equity 2000*, which will take Texas' minority recruitment, retention, and graduation efforts into the next century, becomes effective in August 1994.

The major goals of this plan include increasing the undergraduate graduation rates of Hispanic and Black students; increasing the number of Black and

Hispanic graduate and professional school graduates and the number of Black and Hispanic faculty, administrators and professional staff; and increasing the number of minorities and women on governing boards at Texas colleges and universities.

DROPOUT PREVENTION

■ Youth Opportunities Unlimited (Y.O.U.) — This nationally recognized program combines university-based work-study with for-credit high school instruction and support services, including health

ENROLLMENT BY ETHNICITY: FALL 1992

Universities

White	66.5%
Black	8.7%
Hispanic	16%
Other*	8.8%



Community and Technical Colleges

White	63.5%
Black	10%
Hispanic	22%
Other*	4.5%



Health-Related Institutions

White	72%
Black	5.3%
Hispanic	9.6%
Other*	13.1%



* Other may include: Asian, American Indian and International

care, counseling and enrichment courses, in an eight-week total immersion experience for 14- and 15-year-old students at risk of dropping out of high school. Of the 1,060 students served at 12 institutions in summer 1993, 92 percent completed the program and received high school credit. In early 1993, the Y.O.U. program was identified as a model program to help meet President Bill Clinton's State-of-the-Union address proposal to provide meaningful summer jobs and education to young Americans.

■ *College Bound* — Through this cooperative effort with the Texas Guaranteed Student Loan Corporation, the Coordinating Board provides a semi-annual newsletter to 400,000 students in high-minority school districts throughout Texas. The newsletter provides information on financial aid, college admission standards, career options and tips to help high school students prepare for college.

MINORITY RECRUITMENT

■ *Minority Doctoral Incentive Program* — The 73rd Legislature established this program to provide loans to minority students pursuing doctoral or master's degrees. Loans will be forgiven for participants who serve as faculty or administrators at Texas public or independent higher education institutions.

DEGREES AWARDED BY ETHNICITY: 1992

Associate

White	14,458	70.6%
Black	1,853	9%
Hispanic	3,581	17.5%
Other*	596	2.9%

Bachelor's

White	37,208	75.3%
Black	2,867	5.8%
Hispanic	5,929	12%
Other*	3,434	6.9%

Master's

White	10,369	70.6%
Black	664	4.5%
Hispanic	1,036	7.1%
Other*	2,616	17.8%

Doctoral

White	1,205	60.7%
Black	60	3%
Hispanic	50	2.5%
Other*	670	33.8%

Professional

White	1,029	77.3%
Black	118	8.9%
Hispanic	132	9.9%
Other*	52	3.9%

* Other may include Asian, American Indian and International.

0 20% 40% 60% 80% 100%

The Coordinating Board is seeking donations to fund the program.

■ **Minority Registry** — The names and vitae of more than 900 minority faculty, administrators and graduate students in the Southwestern U.S. is maintained by the Coordinating Board as a resource for institutions seeking to hire more minorities.

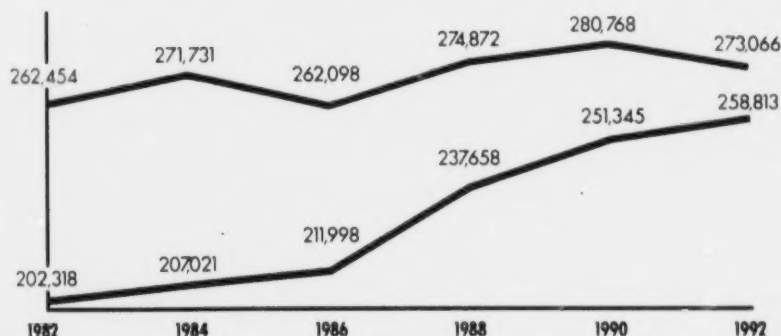
■ **Search Guidelines to Enhance Diversity** — The Coordinating Board publishes and distributes guidelines to help institutions of higher education ensure that minorities, women and persons with disabilities are considered for executive, faculty and other professional positions.

TEXAS ENROLLMENT TRENDS: 1982-1992

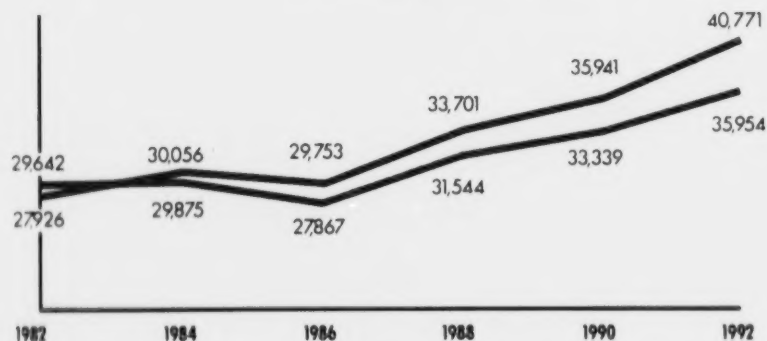
■ Universities

■ Community and Technical Colleges*

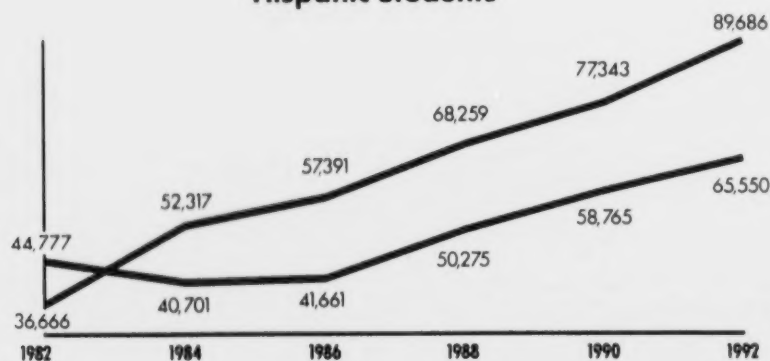
White Students



Black Students



Hispanic Students



*Data prior to 1986 does not include Texas State Technical Institute data.

RESEARCH

INVESTING IN THE FUTURE

TECHNOLOGY TRANSFER

New companies spun off research at Texas institutions of higher education help to ensure the economic future of Texas into the next century:

- International Stellar Technologies (Houston) develops and commercializes high efficiency solar cells.
- Triplex Pharmaceutical (The Woodlands) develops compounds that inhibit the expression of disease-associated genes.
- DTM Corporation (Austin) commercializes a process that allows production of computer-designed, complex prototype parts within hours — not the weeks or months of machining required by conventional methods.
- Accelerator Technology Corporation (College Station) designed and markets a device using X-rays to control insects, bacteria, molds and other infestations in food.

Research on Texas college and university campuses continues to provide advanced educational opportunities for students, generate new and better business and industrial methods and practices, and spawn new products and companies that help fuel Texas' economic growth.

For the first time, in FY 1992 research expenditures by Texas public higher education institutions exceeded \$1 billion. Of that amount, public universities accounted for approximately \$648 million and public higher education health-related institutions accounted for about \$396 million.

Also in FY 1992, royalties, licenses and other transactions involving intellectual property produced through higher education research efforts earned at least \$5.2 million — a 62 percent increase over FY 1991.

The 73rd Texas Legislature reaffirmed its commitment to research efforts by appropriating more than \$100 million in special item funding for research and an additional \$60

million, for the fourth consecutive biennium, to fund two highly successful research grant programs administered by the Coordinating Board.

These programs — the Advanced Research Program (ARP) and the Advanced Technology Program (ATP) — together are the nation's largest competitive, peer-reviewed, state-supported research grant programs. Each biennium, panels of out-of-state scientists and industry representatives analyze more than 3,000 research proposals for funding under these programs.

In 1993, \$6.4 million in ATP grants — matched by industry — were awarded to previously funded, successful ATP projects which showed

the greatest potential for commercialization.

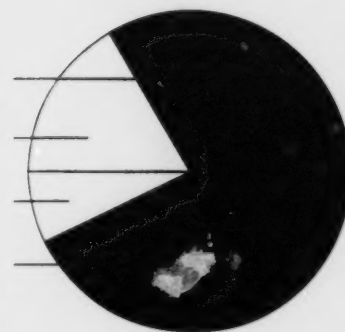
More than 2,200 undergraduate and 4,300 graduate students have worked on ARP- and ATP-sponsored projects to date. To support efforts to recruit more minority students into science and engineering, these programs provide supplemental funds to university researchers who hire minority students.

SPECIAL ITEMS

Much of the state's funding for higher education research is appropriated through special items in the state's budget. For the 1994-95 biennium, special item funding for research totals more than \$100 million.

SOURCES OF RESEARCH EXPENDITURES: FY 1992

(in millions)	
State Government	\$269 23%
Business and Industry	\$209 18%
Institutional Funds	\$97 8%
Federal Government	\$592 51%
Total:	\$1.2 billion



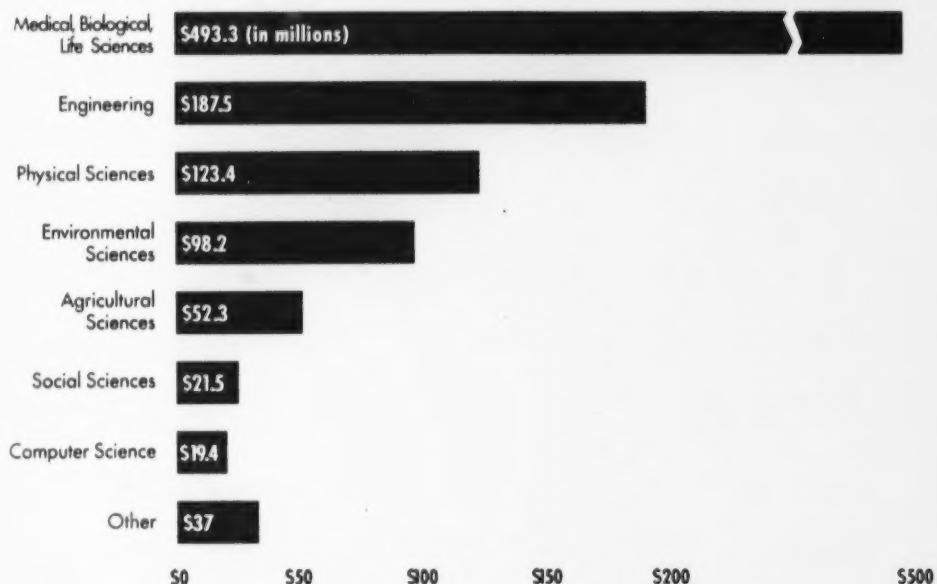
New items for this biennium include:

- \$700,000 for the Center for Commercial Development of Space at the University of Houston;
- \$600,000 for the Center for Environmental Research Management at University of Texas at El Paso;
- \$500,000 for biotechnology research at Texas Tech University; and
- \$500,000 for a Houston partnership for environmental studies.

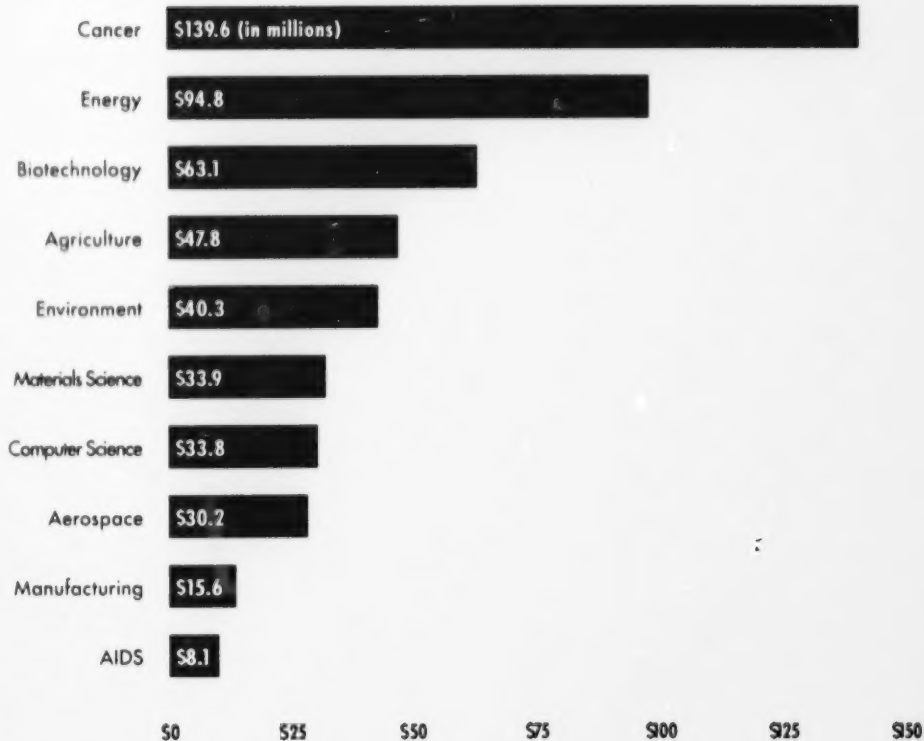
TEXAS TECHNOLOGY

To encourage technology transfer from college and university researchers to business and industry, the Coordinating Board is a contributing sponsor of the *Texas Technology* newsletter. Each issue features examples of commercial applications of university research, examples of available technologies and news items about technology transfer. Other partners in the effort include the Texas Department of Commerce, the Texas Engineering Experiment Station and the Texas Innovation Network.

TEXAS UNIVERSITY RESEARCH EXPENDITURES BY DISCIPLINE: 1992



TEXAS UNIVERSITY RESEARCH EXPENDITURES BY APPLICATION*: 1992



*Funding can come from multiple disciplines.

CAMPUS PLANNING

EVALUATING NEED AND COST

AGING CAMPUSES

Approximately 45 percent of the 45.7 million gross square feet of educational and general space on Texas college and university campuses is contained in structures built between 1965 and 1980. Many of these buildings will need major rehabilitation over the next decade.

The Coordinating Board took steps in FY 1993 to better assess the need for new construction on campuses and to better evaluate the efficient use of building space. The Board developed a new model to more accurately assess facilities needs at Texas' public universities, health-related institutions and technical college campuses. Also, the Board adopted new space utilization standards to encourage more efficient use of classrooms and laboratories.

Putting technology to work, the Coordinating Board implemented a computerized reporting system to better track institutions' facility planning efforts and the condition of campus buildings. Institutions use this system to assess and report deferred maintenance, plans for reducing it, and plans for repairs, new construction, and land acquisition.

Coordinating Board rules call for the elimination of all critical deferred maintenance on Texas university campuses by 1995. Critical deferred maintenance projects are

those that put facilities, their occupants or the mission of the institution at risk. Total deferred maintenance at each institution must be no greater than 5 percent of the institution's educational and general space replacement value. These requirements are among the criteria used by the Coordinating Board to evaluate institutions' requests for new construction.

New construction projects that cost more than \$300,000 and repair and renovation projects that cost more than \$600,000 must be approved by the Coordinating Board.

Projects financed by tuition revenue bonds authorized by HB 2058 of the 73rd Legislature in 1993 must be reviewed to ensure that they meet cost, efficiency and space-need standards, but they do not require Coordinating Board approval.

HIGHER EDUCATION ASSISTANCE FUND

The Higher Education Assistance Fund (HEAF) provides funds for new construction, repair and rehabilitation, land acquisition, educational equipment and library materials at universities, health-related institutions and technical colleges that do not have access to Permanent University Fund bond proceeds.

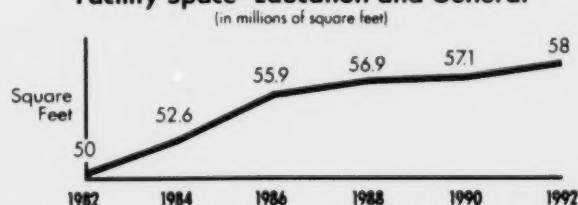
Effective Sept. 1, 1995, the HEAF will increase to \$225 million from \$100 million per year, with \$50 million of that amount set aside for an endowment capping at \$2 billion. Texas voters approved a constitutional amendment in November 1993 to make the Texas State Technical College System eligible for a maximum 2.2 percent of the annual HEAF allocation.

CONTROLLING FACILITY COSTS

Maintenance and Utility Appropriations



Facility Space - Education and General



FUNDING

HIGHER EDUCATION APPROPRIATIONS

TUITION RANKING

In a national comparison of undergraduate tuition and fees, Texas ranks 48th for resident students and 35th for nonresidents in 1992-93.

Source: State of Washington, Higher Education Coordinating Board

Faced with a projected \$5 billion budget deficit, state lawmakers employed a series of belt-tightening and bookkeeping changes to approve a \$71 billion biennial budget that increased general revenue funding for higher education overall by approximately 9 percent.

Adjustments in the appropriations bill, legislative directives and the requirement that institutions absorb the second year of a 3 percent employee pay raise resulted in flat or reduced funding for some campuses. Every health-related institution received an increase.

Legislators continued to emphasize the importance of undergraduate education, but phased in implementation of formula adjustments which more heavily weigh undergraduate education relative to graduate programs and cap the number of doctoral hours eligible for formula funding. Proposals to tie a percentage of higher education funding to performance were not implemented.

With the exception of health-related institutions, most of the state's total appropriation is allocated to institutions through a group of formulas developed by advisory commit-

tees and adopted by the Coordinating Board. Some costs — such as utilities — are allocated by individual justification for each institution.

SOUTH TEXAS

Institutions near the Texas-Mexico border emerged as the major beneficiaries of higher education increases. The 73rd Legislature added more than \$50 million to formula and special item funding for a total of about \$96 million for program development and authorized

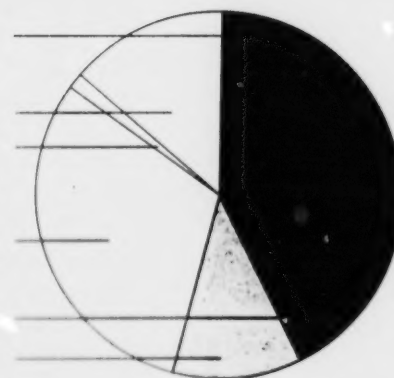
almost \$240 million in tuition revenue bonds to help underwrite construction and renovation programs at institutions in predominantly Hispanic South Texas. This funding will be used to construct a new campus for Texas A&M International University — the first new campus to be built in Texas in more than 20 years. An upper-level institution currently sharing a campus with Laredo Community College, Texas A&M International University will expand to four-year status on Sept. 1, 1995.

ALL FUNDS APPROPRIATIONS: 1994-95 BIENNIIUM

(in millions)

General Academic Institutions	\$3,552	38.1%
Community Colleges	\$1,283.1	13.8%
Texas State Technical Colleges	\$117.7	1.3%
Health-Related Institutions	\$2,866.6	30.8%
Services of the A&M System	\$419.9	4.5%
All Other	\$1,069.7	11.5%

Total: \$9.3 Billion



GENERAL REVENUE: 1994-95 BIENNIIUM

(in millions)

General Academic Institutions	\$2,731.2	42.6%
Community Colleges	\$1,283.1	20%
Texas State Technical Colleges	\$105.8	1.7%
Health-Related Institutions	\$1,618	25.3%
Services of the A&M System	\$226	3.5%
All Other	\$442.6	6.9%

Total: \$6.4 Billion



FACILITIES FUNDING

Texas' institutions of higher education have access to two constitutionally guaranteed sources of funding for new construction and major repair and rehabilitation of buildings, and for equipment, library and land purchases. The Higher Education Assistance Fund provides funds for facilities and construction to the 28 institutions outside the Permanent University Fund, which provides funds for this purpose to the University of Texas and Texas A&M University Systems. (See Campus Planning section, page 11.)

SPECIAL ITEM FUNDING

Funding for special items continues to grow as institutions seek additional line-item appropriations to help underwrite expenses. Special item funding for the current biennium totals more than \$621 million and constitutes about 78 percent of all education and general state support to institutions of higher education.

In the 1994-95 biennium, eight community colleges received funding for special items — up from one in the previous biennium.

Current Funds Expenditures Per FTE Student

General Academic Institutions

	Texas	10-State	National
1986-87	\$ 7,790	\$ 9,780	\$ 8,780
1987-88	7,960	10,500	9,540
1988-89	8,620	11,160	10,090
1989-90	8,610	12,000	10,760
1990-91	8,929	12,581	11,731

Excludes expenditures for integral medical programs.

Source: IPEDS Finance Survey, U.S. Department of Education, *Report of the Committee on National Data Sources for Use in Formula Funding*, September 1993.

TUITION AND FEES

No new tuition increases at Texas public universities were approved by the 73rd Legislature, but new student fees may be imposed on a number of campuses. The graduated schedule of annual resident tuition increases, adopted in the previous session, was retained through 1996-1997. Financially needy students, whose parents' death is

directly attributable to their military service, are exempt from paying tuition and fees. Also exempt are students who were in state foster or residential care on or after the day before they turn 18, provided they enroll in college within three years of leaving that care. Tuition and fees for students attending Texas public community colleges are established by local boards of trustees.

COORDINATING BOARD

LEADERSHIP AND COORDINATION

MISSION STATEMENT

The mission of the Texas Higher Education Coordinating Board is to provide the Legislature advice and comprehensive planning capability for higher education, to coordinate the effective delivery of higher education, to efficiently administer assigned statewide programs, and to advance higher education for the people of Texas.

Created by the Texas Legislature in 1965, the Texas Higher Education Coordinating Board promotes quality, access and efficiency in all aspects of higher education through creative leadership and effective management. Taking the initiative on major issues of concern to policy makers and the public, the Coordinating Board works to help find solutions and to be a source of reliable information.

Mindful of the ever-growing demand for state funds, the Coordinating Board works with institutions and other agencies to assess the need for new programs and facilities to help Texas' growing and changing population.

To meet its challenges, the Board has:

- Brought together institutions to build collaborative solutions and improve programs;
- Initiated in-house studies and proposed strategies to address the critical issues facing higher education;
- Developed a tracking system to monitor graduation and job placement rates;
- Improved internal operations to become more efficient in lean economic

times without sacrificing effectiveness;

- Helped establish new technology links to deliver instruction, share library materials and collect and distribute data;

- Designed and adopted a new space planning model to more accurately assess higher education's facility needs;

- Distributed information on financial aid programs, admission standards and guidelines to help high school students prepare for college;

- Administered the state's plan to recruit and retain minority students, faculty and administrators; and

- Forged stronger working relationships with the Legislature, the institutions and other state agencies

to address issues such as dropout prevention, admission standards, teacher education and technology transfer.

IDENTIFYING THE ISSUES

- Performance Funding — The Coordinating Board led the institutions in a dialogue on accountability in higher education. From these discussions came three separate proposals on performance-based funding: one for general academic institutions, one for health-related institutions, and one for community and technical colleges. Although the Legislature elected not to link funding to performance, accountability continues to be an issue and it

COORDINATING BOARD STAFF PROFILE

August 1993

	TOTAL WORK FORCE		ADMINISTRATIVE		PROFESSIONAL	
	Number	Percent	Number	Percent	Number	Percent
White	172	67.9%	7	87.5%	100	78.2%
Black	28	11.1%	1	12.5%	10	7.8%
Hispanic	45	17.8%	—	—	15	11.7%
Other	8	3.2%	—	—	3	2.3%
Total	253	100%	8	100%	128	100%

COORDINATING BOARD OPERATING BUDGET

	1990	1991	1992	1993
General Revenues	\$9,379,281	\$9,403,541	\$9,364,268	\$7,086,445
Federal	1,000,510	1,168,438	1,195,167	1,394,974
Other	718,196	1,095,477	1,388,943	4,759,315
Total	\$11,097,987	\$11,667,456	\$11,948,378	\$13,240,734

is critical that higher education help develop policies to address it.

■ **Doctoral Hour Funding** — The Coordinating Board initiated the discussion on the appropriate level of doctoral hours that should be funded by the state. The Comptroller's Texas Performance Review recommended capping funds for doctoral study and the 73rd Legislature set the cap at 130 doctoral hours. The Board has taken the initiative to work with the institutions on guidelines that encourage the timely completion of doctoral degrees.

■ **South Texas Community College** — Following a comprehensive study, the Coordinating Board recommended converting the Texas State Technical College-Harlingen extension center in McAllen into a community college. The Legislature built on the Board's research and established the South Texas Community College in McAllen which began to operate in September 1993.

PARTNERSHIPS

The Coordinating Board collaborates with other state agencies in many key policy areas, including:

■ **Office of the State Comptroller:** assessing deferred maintenance, identifying cost-savings in higher education, exploring research needs of state universities;

■ **Texas Department of Commerce:** publicizing how campus research can be converted to business opportu-

nities, operating a "hot line" identifying education and training opportunities for potential new business recruits, promoting Smart Jobs, launching Quality Work Force Planning initiatives, collaborating on Tech-Prep curriculum development;

■ **Texas Guaranteed Student Loan Corporation:** underwriting *College Bound* newsletter targeted to predominantly minority school districts;

■ **Texas Employment Commission:** jointly tracking job placement of college graduates;

■ **Texas Education Agency:** jointly reviewing programs to improve teacher education, collaborating on Tech-Prep curriculum development, cooperating to reduce high school dropout rates, launching Quality Work Force Planning initiatives.

RESPONSIBILITIES

■ **Develop and recommend funding formulas.**

■ **Advise the Governor and Legislature on higher education issues and needs.**

■ **Evaluate and assess the need for new higher education programs, facilities and institutions.**

■ **Promote efficiency and the prevention of waste.**

■ **Evaluate research programs and award state research grants.**

■ **Encourage and monitor equal educational opportunity programs.**

■ **Administer student financial aid programs.**

REPORTS AND PUBLICATIONS

Access and Equity 2000, 1994.

College Bound, semi-annual newsletter.

Educational Opportunities at Texas Public Community and Technical Colleges, 1993-94.

Educational Opportunities at Texas Public Universities, 1993-94.

Enrollment Forecasts — 1995-2005, Texas Institutions of Higher Education, 1992.

Facts on Higher Education in Texas, 1993.

Faculty Teaching Workload in Texas Public Universities, 1983-1992.

Fees at Texas Public Institutions of Higher Education, 1993.

Financial Aid for Texas Students, 1993.

Master Plan for Career and Technical Education, 1993.

Master Plan for Texas Higher Education, 1993.

Meeting the Challenge: The Future of Pharmacy Education in Texas, 1993.

Planning for College Admission: Advice for High School Students, 1993.

Reach for Success (guide for high school students), 1993.

Research Expenditures in Texas Public Institutions of Higher Education, 1993.

Residence Status: Rules and Regulations, 1992.

Search Guidelines to Enhance Diversity, 1992.

Space Projection Model for Higher Education Institutions in Texas, 1992.

Statistical Report, 1992.

TASP: Annual Report on the Effectiveness of Remediation, 1993.

Texas Technology, monthly newsletter.

■ **Collect and report data on higher education.**

■ **Review institutions' appropriations requests.**

■ **Contract for family practice residency programs.**

■ **Prescribe changes in institutions' roles and missions.**

■ **Develop and follow the Master Plan for Texas Higher Education.**

■ **Review degree programs for continued need.**

■ **Promote a core curriculum.**

■ **Resolve transfer of credit disputes.**

■ **Regulate degrees awarded by private, unaccredited**

institutions.

■ **Administer the Texas Academic Skills Program (TASP).**

■ **Distribute information on program offerings, financial aid, college admission requirements and credit transfer policies.**

■ **Cooperate with other agencies on work force development initiatives.**

■ **Interpret tuition, fee and residency statutes.**

■ **Administer the federal State Postsecondary Review Program.**